



Derek Feichtinger ::

CMS VO Contact Report for T2_CH_CSCS

WLCG SwissOps Meeting 20. May 2021



1 CMS Overview

2 Trouble Tickets

3 CMS dcache Storage access rules

4 Monitoring Status Graphs



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Overview

- SAM status over last month looked ok. . . **until today**
 - major impact since the end of the downtime
- CMS monitoring for the period before today looks fine
- storage cleaning campaign: mostly finished. Some deletions of data still to be done
- cms02.lcg.cscs.ch: I decommissioned the machine and moved the xroot services to cms03.
- move to r/w xrootd config for CMS: need a minor config change by CSCS to be able to move service from ATLAS port 1094 to CMS dedicated port 1096.
- I am prototyping the new storage access permissions we need to implement for CMS at the Tier-3 test systems.



Storage Cleaning Campaign - mostly done

- ☒ automatic cleaning (tmpwatch) installed as systemd timer on cms03 for selected CMS directories
- ☒ Storage cleaning campaign
 - ☒ Developed workflow to correlate information from
 - CSCS dcache: user directories
 - CERN phonebook: get email addresses based on user directory names
 - PSI CMS Tier-3 IdM: identify Swiss users (also historic)
 - ☒ developed script that will do automatic mail sending, text containing users specific volume usage, and adapted for their status in respect to the Swiss collaboration
 - ☒ launch via CERN lxplus since generated mail is only routed within same domain (security)
- ☐ group space still to be tackled



Xroot access and cms02 decommissioning

- ☒ moved CMS federation host `xrootd` installation and `squid` to `cms03` and decommissioned `cms02`.
- ☐ Need to have exported path on `storage01:1096` door reconfigured in accordance with what is done on the service on port 1094. As soon as this is done, will enter the new service into our CMS site configuration,



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GGUS Tickets and requests

Link to [open GGUS tickets for T2_CH_CSCS](#)

| Ticket-ID | Status | Priority | Date | Subject |
|-----------|----------|----------|------------|-----------------------------|
| 152070 | assigned | urgent | 2021-05-20 | SAM failures after downtime |
| 152033 | in progr | urgent | 2021-05-17 | xroot cms02 decommiss. |
| 151265 | on hold | less urg | 2021-04-08 | WebDAV transfers |



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The problem

- Only 2 dcache auth rules mapping to local storage entities

| DN | Role/Group | account | group | uid | gid |
|----|-------------------|---------|-------|------|------|
| * | /cms/Role=cmsprod | cmsprd | cms | 4199 | 4001 |
| * | * | cms001 | cms | 4100 | 4001 |

- All CMS file space writable by CMS group

```
drwxrwxr-x 3 4101 4001 512 Mar 30 17:52 /pnfs/.../trivcat
```



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drwxrwxr-x 3 4101 4001 512 Mar 30 17:52 /pnfs/.../trivcat
```

ign

- Each CMS user could wipe the whole storage clean using a recursive remove operation!
- Scripting errors lead to frequent wrong files in all kinds of paths



Opt 1: 3 shared accounts

- cmsops,cms: all central ops and our CMS local managers
- cmsuser,cms: all normal users
- cmschusr,cms: all Swiss users

| | | |
|------------|-----------------|-----------------------------------|
| drwxr-xr-x | cmsops:cms | .../trivcat |
| drwxr-xr-x | cmsops:cms | .../trivcat/store/user |
| drwxr-xr-x | cmschusr:cms | .../trivcat/store/user/swissuserA |
| drwxr-xr-x | cmschusr:cms | .../trivcat/store/user/swissuserB |
| drwxrwxr-x | cmsops:cms | .../trivcat/store/temp/user |
| drwxr-xr-x | cmsops:cms | .../trivcat/store/group |
| drwxrwxr-x | chgroup:chgroup | .../trivcat/store/group/groupA |

Features

- Only a cmsops user can create a /store/user directory
- All CMS users can create dirs in /store/temp/user
- all users mapped to same account can delete each other's data
- all Swiss users can write to all group spaces and delete them

Requires

- maintaining a list of Swiss user certs
- Swiss users must be added to chgroup
- creation of user directories in /trivcat/store/user



Opt 2: 2 shared + Swiss user accounts

- cmsops,cms: all central ops and our CMS local managers
- cmsuser,cms: all normal users
- cms_u_A,cms_u_B: an account for each swiss users (non-login)

| | | |
|------------|-----------------|-----------------------------------|
| drwxr-xr-x | cmsops:cms | .../trivcat |
| drwxr-xr-x | cmsops:cms | .../trivcat/store/user |
| drwxr-xr-x | cms_u_a:cms | .../trivcat/store/user/swissuserA |
| drwxr-xr-x | cms_u_b:cms | .../trivcat/store/user/swissuserB |
| drwxrwxr-x | cmsops:cms | .../trivcat/store/temp/user |
| drwxr-xr-x | cmsops:cms | .../trivcat/store/group |
| drwxrwxr-x | chgroup:chgroup | .../trivcat/store/group/groupA |

Features

- Swiss user dirs only writable by each Swiss user
- group spaces only writable by members of these Swiss groups
- Only a cmsops user can create a /store/user directory
- All CMS users can create dirs in /store/temp/user and non-Swiss users can delete each other's data

Requires

- creation of user/group accounts and life cycling them
- maintaining a list of Swiss user cert to account mappings
- maintaining account to group mappings



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CMS site status based on SAM for CSCS

It was looking so good on Tuesday...

T2_CH_CSCS Site Status Detail (Tu, 2021-May-18 14:54 GMT)

| Metric | Prev. Month | Previous Week | Yesterday | UTC Today | Following Week |
|----------------------------|-------------|---------------|-----------|-----------|----------------|
| Downtime(s) | | | | | |
| SAM (1day) | | | | | |
| HC (1day) | | | | | |
| FTS (1day) | | | | | |
| SiteReadiness (1day) | | | | | |
| Life Status | | | | | |
| Life Override | | | | | |
| Prod Status | | | | | |
| Prod Override | | | | | |
| Crab Status | | | | | |
| Crab Override | | | | | |
| GGUS tickets: | [151265] | [151997] | [152033] | | |
| SAM Status | | | | | |
| Hammer Cloud | | | | | |
| FTS Status | | | | | |
| Site Readiness | | | | | |
| Summary | | | | | |
| arc04.lcg.cscs.ch / ARC-CE | | | | | |
| SAM Status | | | | | |
| Downtime(s) | | | | | |
| ETF WN-cvmfs | | | | | |
| ETF WN-xrootd-access | | | | | |
| ETF WN-basic | | | | | |
| ETF CONDOR-JobSubmit | | | | | |



CMS site status based on SAM for CSCS

Today

| Metric | Prev. Month | Previous Week | Yesterday | UTC Today | Following Week |
|----------------------------|-------------|-------------------|-----------|-----------|----------------|
| Downtime(s) | | | | | |
| SAM (1day) | | | | | |
| HC (1day) | | | | | |
| FTS (1day) | | | | | |
| SiteReadiness (1day) | | | | | |
| Life Status | | | | | |
| Life Override | | | | | |
| Prod Status | | | | | |
| Prod Override | | | | | |
| Crab Status | | | | | |
| Crab Override | | | | | |
| GGUS tickets: | [151265] | [151997] [152033] | | [152070] | |
| SAM Status | | | | | |
| Hammer Cloud | | | | | |
| FTS Status | | | | | |
| Site Readiness | | | | | |
| Summary | | | | | |
| arc04.lcg.cscs.ch / ARC-CE | | | | | |
| SAM Status | | | | | |
| Downtime(s) | | | | | |
| ETF WN-xrootd-fallback | | | | | |
| ETF WN-analysis | | | | | |
| ETF WN-cvmfs | | | | | |
| ETF WN-basic | | | | | |
| ETF WN-squid | | | | | |
| ETF CONDOR-JobSubmit | | | | | |
| ETF WN-isolation | | | | | |
| ETF WN-xrootd-access | | | | | |
| ETF WN-mc | | | | | |
| ETF WN-env | | | | | |
| ETF WN-frontier | | | | | |



CSCS queue plots 7 days





Status of pilots



Frontend pressure





CMS job types

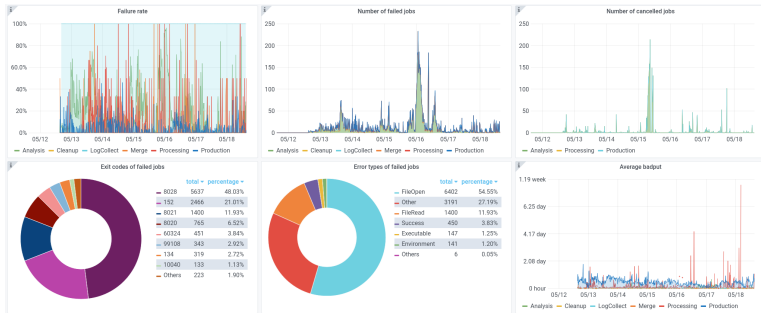




CMS job efficiency and memory



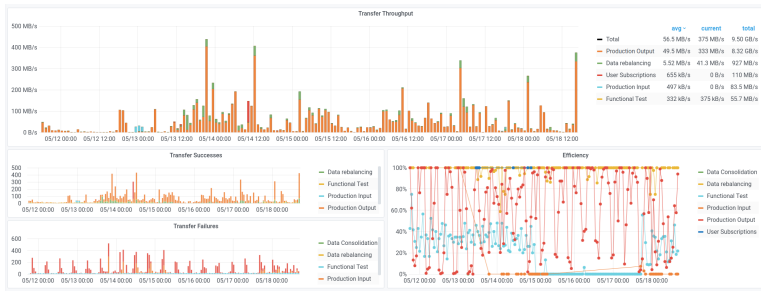
CMS job failures



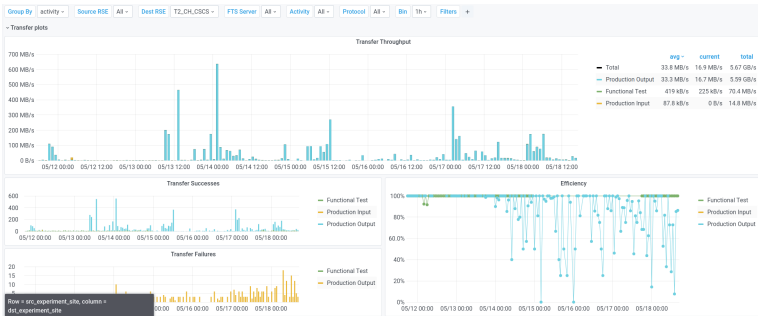
| Error | Description |
|-------|-------------------------------------|
| 8028 | FileOpenError with fallback |
| 152 | CPU limit exceeded |
| 8021 | FileReadError (May be a site error) |



FTS transfers outgoing



FTS transfers incoming





FTS transfers incoming (2)

